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PATENT APPLICATION
Mo4861
HE-146

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION OF)
BERND WILLING) GROUP NO.: 3651
SERIAL NUMBER: 09/195,005) EXAMINER: J. VALENZA
FILED: NOVEMBER 18, 1998) RESPONSE TO PAPER NO. 11
TITLE: DEVICE FOR INSERTING AND)
REMOVING WORK STATIONS)
CIRCULATING ON A CHAIR)

APPEAL BRIEF

Assistant Commissioner for Patents

Washington, D.C. 20231

Sirs:

A separate Petition for Extension of time is being filed simultaneously herewith.

I. REAL PARTY IN INTEREST

The named inventor has assigned his interest in this application to Hennecke GmbH. Hennecke GmbH is therefore the real party in interest in this appeal.

II. RELATED APPEALS AND INTERFERENCES

The Appellant is unaware of other appeals or of any interference that would directly affect or be directly affected by, or have bearing on, the present appeal.

III. STATUS OF CLAIMS

Claims 1-3 and 6, all the Claims in the application, are pending. All the claims stand rejected and are the subject of this appeal.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an enveloped addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 8/14/01
Date

Noland J. Cheung, Reg. No. 39,138
Name of applicant, assignee or Registered Representative

Signature
August 14, 2001
Date

IV. STATUS OF AMENDMENTS

In the Appellant's Response after the Final Action dated March 7, 2001, the Appellant canceled claims 4-5. In the Advisory Action dated March 21, 2001, the Examiner indicated that this cancellation of Claim 4-5 was recorded.

V. SUMMARY OF THE INVENTION

The present invention provides a device for carrying out a uniform sequence of working steps on travelling work station wagons circulating on an oval track, wherein the wagons are moved by means of detachable connection elements to a circulating chain drive. The detachable connection elements are provided and/or engaged on one side of the wagon. The device of the present invention also composes at least one insertion and at least one removal guide track, to each of which a transfer point to the chain is allocated and is provided on the outside of this oval conveyor system. Coupling elements are further provided via which the wagons may be coupled into the guide tracks. On the other side of the wagon, switchable points elements are provided, in which insertion/-removal positions release the connection elements and couple the coupling elements for removal purposes and/or uncouple the coupling elements and bring about the engagement of the connection elements for insertion purposes, which are provided at each transfer point. See page 3, lines 2-16.

An embodiment of the present invention comprises the chain circulating in an oval, for example, and the wagons running in a guide channel. The wagons have guide rollers running on laterally projecting mountings in the guide channel and the wagons also comprise at least one carrier pin, wherein carrier cages located on the chain removably engage the carrier pin on the wagon. See page 3, lines 17-22. The present invention preferably provides that each work station wagon has a spacer with respect to the next wagon, wherein the spacing of the connection element parts on the chain (i.e., the carrier cages) have a spacing which corresponds to the length of the wagon and spacer combined. See page 4, lines 16-20.

The insertion and removal tracks may take the form of guide channels which are arranged parallel to the chain drive and at a distance from its guide channel, wherein the distance between the chain and the guide channel approximately

corresponds to the width of the work station wagon. On the outside of the wagon, guide rollers are then also provided, which run in the guide channel of the removal guide track after transfer from the chain to the removal guide track. At the transfer point, the guide channel of the removal guide track has interruptions, which are closed by means of points tongues if no transfer is to take place. If the wagon, which passed by the transfer point is to be removed, the points tongues are switched in such a way that they guide the guide rollers of the wagon into the guide channel of the removal track. See page 3, line 27 – page 4, line 9.

VI. ISSUES

The Claims stand rejected as follows:

- (a) Claims 1-6 stand rejected under 35 U.S.C. § 112 for being based on an inadequate disclosure; and
- (b) The drawings are objected to under 37 CFR 1.83(a).

VII. GROUPING OF CLAIMS

None of the claims will be argued separately. Claims 1-3 and 6 therefore stand or fall together.

VIII. ARGUMENTS

I. The disclosure is structurally adequate

Claims 1 - 6 were rejected under 35 U.S.C. § 112(a) for being based on inadequate disclosure. The Examiner indicates that the disclosure is inadequate as to structurally how the system knows when to operate switches 27, 37 to timely divert the selected rollers 8a, 8b of the selected wagon. Furthermore, the Examiner asks how switch 37,37' knows when there is an opening to supply a wagon into.

The Examiner also asks how the wagon is inserted via pushing by the following wagon if according to Claim 4 the insertion guide has a high speed drive which should slam the inserted wagon into the back of a preceding wagon. Finally, the Examiner asks what the structural design is of the load-dependent high speed drive on the insertion track. These two inquiries are directed toward the language of Claims 4-5. As indicated in the Appellant's Response after Final Action dated March 7, 2001, Claims 4 - 5 have been cancelled thereby obviating the Examiner's rejection of these claims under this section.

As the Appellant indicated in the Response and Amendment dated August 17, 2000 and in their Response after Final Action dated March 7, 2001, in the Specification, the workstation wagons are used in a manufacturing environment to facilitate the production of a known series of processing steps. Since these steps form an assembly line, the position of switch 37, which is the points tongues that controls the removal/insertion of wagons, can be programmed by any known means of process control. Their position can also be manually operated as necessary to adjust the manufacturing sequence. Other structural details and operations are known to those ordinarily skilled in the art.

The Appellant respectfully submits that one of ordinary skill in the art could detect an empty space in the sequence of circulating wagons. Starting the friction drive for the wagon to be inserted can be easily made by suitable control means or by an operator viewing the empty space. An operator may start the wagon to be inserted at the moment that the wagon meets the empty space.

Furthermore, in *Staehelin v. Secher*, 24 U.S.P.Q.2d 1513 (B.P.A.I. 1992), the Board observed that it "an application need not teach, and preferably omits that which is well-known in the art". The Board also observed that "the law does not require a specification to be a blueprint" because requiring the specification to provide every minute detail "would turn [patent applications] into production specifications, which they were never intended to be." 24 U.S.P.Q.2d at 1516. The Appellant therefore respectfully refrains from supplying the details of a process control system suitable for operating a circulating chain or a motor driven track.

Since the wagons are work-station wagons, the work is performed in the wagons at different locations around the track, while the wagons circulate. Accordingly, the wagons stop, start, and move at variant speeds as they move along the track to facilitate the manufacturing steps. The motor driven guide tracks can also move the wagons at variable speeds as necessary for insertion of a wagon onto the circulating chain. Accordingly, the space for insertion may be large due to the nature of the steps in the manufacturing process. For example, if wagon IV was missing in Fig. 2 of the drawings, wagon X may be inserted behind wagon V. As a result, switching may be easily made manually or by process control.

Therefore, the Appellant respectfully submits that Claims 1 – 3 and 6 overcome the Examiner's 35 U.S.C. § 112 rejection.

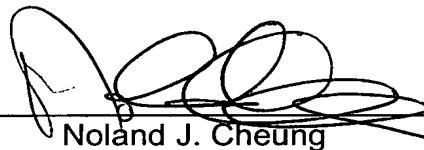
II. Objection to the drawings is rendered moot by the Response after Final Action

The drawings are objected to under 37 CFR 1.83(a). The Examiner indicates that the load-dependent drive of Claim 4 must be shown or the feature(s) cancelled from the claim(s). As indicated in the Response after the Final Action, Claim 4, which contained the feature of the load-dependent drive, has been deleted. Since Claim 4 has been canceled, the Examiner's objections to the Drawings are rendered moot.

CONCLUSION

The Appellant's invention is adequately described by the disclosure as to the insertion and removal guide tracks. The drawing objection is moot because of the cancellation of Claims 4-5. Hence, Appellants submit that each of the Examiner's rejections are in error. The Appellant therefore respectfully requests that the rejections be reversed and that Claims 1-3 and 6 be allowed.

Respectfully submitted,

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APPENDIX: CLAIMS ON APPEAL

1. A device for carrying out a sequence of working steps on travelling work station wagons comprising

a) an oval track wherein said work station wagons are circulating, wherein said wagons comprise at least one detachable connection element provided at one side of the wagons whereby the wagons are connected to a circulating chain which moves said wagons;

b) at least one insertion and at least one removal guide track which is provided on the outside of said oval track, comprising at least one coupling element, wherein said wagons further comprise at least one connecting element provided at the opposite side thereof connectable to the coupling element of the guide tracks;

c) said at least one insertion and at least one removal guide track comprises a transfer point for transfer of said wagons between said circulating chain and said guide tracks with at least one detachable element, with at least one switchable points element located on said guide track, which during the insertion position, release said at least one coupling element and bring about the engagement of said detachable connection element to said chain or during the removal position, couple the coupling elements and removably detach said at least one detachable connection from said chain.

2. A device according to Claim 1, wherein each work station wagon has a spacer which defines the minimum distance between two wagons on said chain and the distance between said chain wherein said detachable connection element is removably connected to the chain at the transfer point is dimensioned in such a way that the wagons allocated to said detachable connection elements have touch-contact via the spacer.

3. A device according to Claim 1, wherein during insertion or removal of said wagon to said device, during transfer, said wagon to be transferred is pushed into position by the following wagon.

6. A device according to Claim 1, wherein said chain comprises at least one carrier cage to receive said at least one detachable connection element.